

ABSTRACT:

Method of positioning a part (43) in a device by means of an actuator (1). The actuator comprises two parts (3, 5) which extend in a main plane and are mutually connected by means of three bridges (7, 9, 11). The bridges can be shortened in respective shortening directions (Y_1 , Y_2 , Y_3) parallel to said main plane by local heating and subsequent cooling down of the bridges.

According to the invention, the shortening directions of the three bridges are parallel, and the two parts of the actuator are rotated relative to one another about an axis of rotation (21, 23) extending perpendicularly to the main plane through alternate shortening of two adjacent bridges (7, 9 or 9, 11) of the three bridges. In this manner, a tensile stress can be built up in the bridges which exceeds a lowered yield point of the material of the bridges when heated, so that relatively high angle of rotation can be achieved between the two parts of the actuator. Besides, the two parts of the actuator can be rotated relative to one another in two opposite directions (R_1 , R_2).

A preferred embodiment of an actuator (1) according to the invention comprises a blade spring (27) which extends parallel to an X-direction perpendicular to the shortening directions and which is coupled to one of the parts of the actuator. By means of the blade spring, a mutual rotation of the two parts of the actuator is transmitted into a translation of an end portion (31) of the blade spring in a direction parallel to the X-direction.

Fig. 1